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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,458	10/16/2003	Tazaemon Kobayashi	P69186US0	5425

136 7590 08/02/2005

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EXAMINER	
MUROMOTO JR, ROBERT H	
ART UNIT	**PAPER NUMBER**
3765	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/685,458	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	Robert H. Muromoto, Jr.	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/24/2005;5/24/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The abstract of the disclosure is objected to because the recitation "The present invention provides..." is redundant and not proper language for US patent practice. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 5 is rejected under 35 U.S.C. 102(b) as being anticipated by Moessinger '041.

The limitations of claim 5 are largely the common structural limitations of a conventional shuttle weaving process and are clearly disclosed by Moessinger. The only limitation that could potentially be considered unconventional would be the means for varying rotational speed at a predetermined timing requirement. Moessinger also clearly discloses that the main shaft has a variable rotational speed to compensate for any loss of speed the shuttle may encounter during the weaving process, whether it be to increase the rotational speed or decrease it, depending on the weaving conditions.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moessinger.

The limitations of claim 1, similar to claim 5 above lists the conventional limitations of a shuttle weaving process and are clearly taught by Moessinger. The limitation not clearly taught in Moessinger is that the rotational speed of the driving means is lower during the presentation of the weft towards the shed and the deceleration of the weft thread through the shed; than the rotational speed of the shaft during the passing of the weft through the shed as recited in claims 1 and 6.

It has already been established that Moessinger provides means for the driving means of the shaft to either accelerate or decelerate the picking operation with regards to a desired weaving speed so as to not break the weft yarn during the weaving process. It is the Examiner's position that one of ordinary skill in the art through routine experimentation could determine the optimum timing pattern to provide the speed variation during the weaving process for a desired end product.

With respect to claim 2, the amount of the speed decrease without any clear criticality or unexpected results is a process variable that one of ordinary skill in the art

could determine through routine experimentation for a desired end product or application.

Claims 3, 4, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moessinger in view of Tanaka '262.

Although Moessinger teaches the limitations listed above, Moessinger does not specifically state an inverter as the means to vary the rotational speed of the motor nor does Moessinger specifically state a limit switch to initiate the speed variation.

However, an inverter used to vary the speed of an electric motor and a limit switch used to initiate the speed variation are widely known and common mechanical means along the lines of gears, cams, and the like. As evidence, the examiner cites Tanaka '262, in which a motor for a yarn-warping device is equipped with an inverter and an upper and lower limit switch. The limit switches, when either activated or deactivated, signal to the inverter the correct motion for the motor.
This use of an inverter and limit switches are functionally equivalent to the use of an inverter and limit switch in the instant invention.

Therefore it would have been obvious to one of ordinary skill in the art to use an inverter and a limit switch configuration in a loom or any other device to provide speed variability to the process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bhm
7/28/2005

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